



## IN THE U.S. PATENT AND TRADEMARK OFFICE

APPLICANT: KATSUMATA ET AL  
SERIAL NO.: 10/734,167  
FILED: December 15, 2003  
FOR: INK WASTAGE ABSORBER AND INK SUPPORTER  
GROUP: 1711  
EXAMINER: Thao T. Tran

DECLARATION

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir,

I, Hideya KINOSHITA, resident of c/o Yokohama Plant,  
Bridgestone Corporation, 1, Kashio-cho, Totsuka-ku,  
Yokohama-shi, Kanagawa-ken, Japan do hereby declare  
that:

1. I was graduated from Tokyo University of  
Agriculture and Technology, Japan in March 1991. Since  
April 1991, I have been employed by Bridgestone  
Corporation, the assignee of the above-identified  
application. I have been engaged in research and

development relating to polyurethane foam in the laboratory of the Company.

2. I am one of the named inventors of the above-identified application and hence, am familiar with the subject matter disclosed in said application.

3. In order to show the feature of the present invention, I conducted the following experiments.

[Experiment 1]

(Production of Foam)

The composition of each of a flexible polyurethane foam used for Examples and a polyurethane foam used for Comparative examples was prepared as follows: 100 parts by weight of a polyol (trade name: V3030, produced by Dow Chemical Japan Limited), 50 parts by weight of a toluendiisocyanate (trade name: TD180, produced by Nippon Polyurethane Industry Co., Ltd.), 4 parts by weight of water, 0.3 part by weight of an amine based catalyst (trade name: DABCO-33LV, produced by Mitsui Air Product Co., Ltd.), 0.3 part by weight of a Tin catalyst (stannous octoate, produced by Nitto Kasei Co., Ltd.), and 1 part by weight of a silicone foaming adjusting agent (trade name: L-520, produced by Japan Unicar Co.,

Ltd.). A flexible polyurethane foam was produced by a one-shot process using the above raw material.

The polyurethane foam having a size of 10 mm×100 mm×100 mm was dipped in water in which sodium di-(normal octyl) sulfosuccinate was dissolved, and then taken up from the water, followed by squeezing of water therefrom, and dried by heating. This foam was Example A. The amount of sodium di-(normal octyl) sulfosuccinate adhering on the foam was 3000 g/m<sup>3</sup>.

The flexible polyurethane foam having a size of 10 mm×100 mm×100 mm was hot-pressed to obtain a compressed foam having a compression magnification of 5 times. The foam was impregnated with sodium di-(normal octyl) sulfosuccinate in the same manner as described above (taken as Example B).

On the other hand, the foam not impregnated with sodium di-(normal octyl) sulfosuccinate was taken as Comparative Example A, and the foam compressed at a compression magnification of 5 times by hot-press was taken as Comparative Example B. These foams of Examples Comparative Examples were subjected to the following tests:

Pigment ink of 0.1 cc was dropped on the foam, and the suction times rate (in second) of the pigment ink was measured.

(Used Pigment Ink)

The pigment ink used as the above-described test is trade name of "ICBK21" manufactured by EPSON CORPORATION, which contains a surfactant of about 10% by weights of overall.

	Example A	Comparative Example A	Example B	Comparative Example B
Amount of succinate (g/m <sup>3</sup> )	3000	0	3000	0
Heat compression (times)	none	none	5	5
Suction rate (sec)	1>	60	1>	20

As a result, the section rates of Examples A & B were much faster than that of Comparative Examples A & B.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated this        day of    2006, 10 , 19

Hideya Kinoshita